Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A system for the transmission of DVB/MPEG digital signals, particularly for satellite communication, said system comprising:

a transmitting station in which a multiplexer (32) inserts null packets in the DVB/MPEG streams originating from one or more 5 VBR coders or generic data sources (31) so that their bit-rates are made uniform, and multiplexes them into a single transport stream that is then applied to a modulating chain for transmission over a propagation channel, and

a receiving station in which a demodulating chain receives the signal being transmitted over the channel, reconstitutes the transport stream and applies it to a demultiplexer, ~~characterized in that~~

wherein the modulating chain in the transmitting station ~~comprises~~ comprising:

- a control circuit (72) controlling the bit-rate of the MPEG coders or generic data sources (31);

- a null-packet eliminator (60) for removing null packets from the transport stream received from the multiplexer (32);

- an ACM modulator (62) downstream of the eliminator, which is programmed for coding the stream with the maximum ruggedness allowed by the rate of the incoming useful packets;

~~in that~~wherein the receiving station comprises:

- an ACM demodulator (64);

- a null-packet re-inserter (66) for re-inserting null packets in the transport stream;

- an evaluator of quality of service (68) driven by the ACM demodulator ~~ACM~~ (64) for notifying the level of quality of the received signal to the bit-rate control circuit (72) of the transmitting station via a return channel; and ~~in that~~wherein the bit-rate control circuit (72) is programmed to change the bit-rate of the VBR coder or coders or generic data sources (31) depending on the level of quality of service notified by the evaluator (68).

2. (Original) The system of claim 1, wherein the null-packet eliminator introduces into the transmitted signal indications of the number and position of the eliminated null packets and the null-packet re-inserter uses said indications to restore the null packets.

3. (Original) The system of claim 2, wherein each packet of the DVB Transport Stream is provided with a synchronization byte, and wherein said indications of number and position of the eliminated null packets consist of a value incorporated in one of the nibbles of the synchronization byte of each DVB packet applied to the ACM modulator,

which value represents the number of null packets that have been deleted by the null-packet eliminator before said DVB packet applied to the ACM modulator and after the previous DVB packet applied.

4. (Original) The system of claim 3, wherein said value incorporated in one of the nibbles of the synchronization byte of each DVB packet is in the range 0 to 15.

5. (Original) The system of claim 2, wherein said indications of number and position of the eliminated null packets consist of at least one byte appended to each DVB packet applied to the ACM modulator, which value represents the number of null packets that have been deleted by the null-packet eliminator before said DVB packet applied to the ACM modulator and after the previous DVB packet applied.

6. (Original) The system of claim 1, wherein the transmitting station further comprises a 20 dummy-frame inserter (80) controlled for inserting dummy frames in the stream downstream of the null-packet eliminator when the useful packets are not sufficient to feed the ACM modulator.

7. (Original) The system of claim 1, wherein the null-packet eliminator comprises a FIFO buffer (72) fed by the multiplexer (32) through a switch (70) which is com-25 mutable to a diverted position by a PID detector (76) when the PID of the transiting packet corresponds to a null packet, and in that the switch in the diverted position addresses the packets to a packet counter (74) having an output controlling the

FIFO buffer (72) to modify the header of a selected packet in the buffer to incorporate the packet count reached by the counter when the switch returns to the non-diverted position.

8. (Original) The system of claim 7, wherein the FIFO buffer is written at the bit-rate of the multiplexer (CK_{TS}) and read at the bit-rate of the ACM modulator (CK_{MOD}).

9. (Original) The system of claim 2, wherein the transmitting station includes a first counter (92) clocked by the modulator symbol rate (R_S), and means (90) for appending to each transmitted packet an input stream synchronization field (ISCR) containing the count reached by the first counter at the instant when each packet is processed, and the receiving station includes a second counter (100) clocked by said recovered symbol rate, a comparator (98) for successively comparing the value contained in the input stream synchronization field (ISCR) of each received packet with the instantaneous count reached by said second counter, and control means driven by the output of the comparator for adjusting the bit-rate of the packets to be delivered to the TS demultiplexer.

10. (Original) The system of claim 9, wherein said control means comprise a FIFO buffer (94) for temporarily storing the received packets, and inserted null-packets reading means (96) for retrieving the packets from the FIFO buffer, and oscillator means (102) for generating the packet-retrieval rate of said reading means.